

REMARKSELECTION OF CLAIMS UNDER 35 USC 121

The Examiner has issued a restriction requirement and requests that applicants elect a single disclosed species for prosecution on the merits.

In response to Examiner's restriction requirement, Applicants elect Invention I, Claims 1-5 and 9-10, for examination. Applicants are hereby canceling Claims 6-8, but are planning to present them in a divisional application.

REJECTION OF CLAIMS 1-5 UNDER 35 U.S.C. §102(e)

The Examiner has rejected claims 1-5 under 35 U.S.C. §102(e) as anticipated by Pfeifer (US 6,725,647). The Examiner alleges that Applicants' system as claimed in Claim 1 is disclosed in the cited prior art reference (Figure 3, col. 6, lines 14-67; col. 7, lines 1-25). Applicants respectfully disagree with the Examiner's rejection.

Claim 1 claims:

1. (original) An exhaust gas aftertreatment system for an internal combustion engine exhaust, the system comprising:
  - an Active Lean NO<sub>x</sub> catalyst (ALNC);
  - an oxidation catalyst coupled downstream of said ALNC; and
  - a selective catalytic reduction (SCR) catalyst coupled downstream of said oxidation catalyst.

Pfeifer, on the other hand, in Figure 3 teaches a system wherein catalyst unit IV is coupled upstream of a three-way catalyst (I). Oxidation catalyst (III) is coupled downstream of catalyst (I), and an SCR catalyst (II) is coupled downstream of catalyst III. The Examiner alleges that catalyst IV of Pfeifer is the ALNC catalyst claimed by Applicants in Claim 1. Applicants respectfully disagree. Specifically, in Column 6, lines 49-56, Pfeifer states:

*"FIG. 3 shows another embodiment of the exhaust gas treatment unit of the present invention. In this case, a fourth catalyst unit, catalyst unit IV is introduced into the exhaust gas pipe upstream of catalyst unit I. Catalyst unit IV is formed by a nitrogen oxide storage catalyst, which temporarily stores the majority of the nitrogen oxides present in lean exhaust gas and releases the previously temporarily stored nitrogen oxides in the presence of a rich, exhaust gas composition. Catalysts of this type are disclosed in the prior art."*

In other words, Pfeifer's catalyst unit IV is a NOx storage catalyst that stores NOx during lean operation, and releases NOx during in the presence of rich exhaust gas. Applicants, however, claim an Active Lean NOx Catalyst (ALNC) coupled upstream of the oxidation catalyst. The ALNC of Applicants' Claim 1 is a device wherein NOx is continuously reduced in an oxygen rich environment through extra injection of reductant, such as hydrocarbon (see Figure 2, and Specification, page 5, lines 1-35). Therefore, Applicants respectfully submit that the cited prior art reference does not teach an ALNC upstream of an oxidation catalyst. Further, there is not even a mention of an ALNC anywhere in the Pfeifer reference.

Therefore, Applicants respectfully request withdrawal of rejection of Claim 1. Further, Claims 2-5 depend from allowable Claim 1, and should therefore be allowed.

**REJECTION OF CLAIM 9 UNDER 35 U.S.C. §102(e)**

The Examiner rejected Claim 9 on the same grounds as Claim 1. Applicants respectfully disagree with the rejection. Claim 9 claims:

9. (An exhaust gas aftertreatment system for an internal combustion engine exhaust, the system comprising:
  - an Active Lean NOx catalyst (ALNC); and
  - a selective catalytic reduction (SCR) catalyst coupled downstream of said oxidation catalyst.

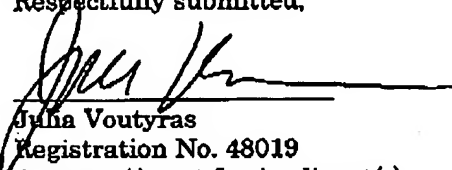
The Examiner alleges, same as in rejection of Claim 1, that catalyst IV is an ALNC. Applicants respectfully disagree with this allegation, and refer to Column 6, lines 49-56 of Pfeifer, wherein it is specifically stated that catalyst IV is a NOx storage catalyst. Therefore, Applicants respectfully submit that Claim 9 is not anticipated by the cited reference and allowance is requested.

The Examiner allowed Claim 10 of the subject patent application.

No other art is cited in the Office Action. Based on the foregoing comments, the above-identified application is believed to be in condition for allowance, and such allowance is courteously solicited. If any further amendment is necessary to advance prosecution and place this case in allowable condition, the Examiner is courteously requested to contact the undersigned by fax or telephone at the number listed below.

Please charge any cost incurred in the filing of this Amendment, along with any other costs, to Deposit Account 06-1510. If there are insufficient funds in this account, please charge the fees to Deposit Account No.06-1505.

Respectfully submitted,

  
Julia Voutyras  
Registration No. 48019  
Attorney/Agent for Applicant(s)

Date: May 9, 2005  
Ford Global Technologies, LLC  
600 Parklane Towers East  
Dearborn, Michigan 48126  
Phone: 313-390-4650  
Fax: 313-322-7162